

REMARKS

Claims 1-13 and 15-20 are now pending in this application for which applicants seek reconsideration.

Amendment

Independent claims 1 and 4-7 have been amended to define that the first sound signal is independent of the second sound signal so that contents of the first sound signal for the first sound beam are for one listener and contents of the second sound signal for the second beam are for another listener. See at least Fig. 4 for support. New claim 20 depends from claim 1 and further defines that the sound level adjusting unit adjusts gains of both the first and second sound signals in real time based on the measured levels so that the first and second sound signals have equal magnitudes. See paragraphs 76-79 of the published application (USPGP 2007/0076905). No new matter has been introduced.

Art Rejection

Claims 1-13 and 15-19 were rejected as follows:

- (1) claims 6 and 18 rejected under 35 U.S.C. § 102(b) as anticipated by Yanagawa (USP 5,953,432);
- (2) claims 1, 4, 15, and 16 rejected under 35 U.S.C. § 103(a) as unpatentable over Yanagawa in view of Yoshino '448 (USP 7,054,448) and Asada (USPGP 2006/0050897);
- (3) claims 2 and 3 rejected under § 103(a) as unpatentable over Yanagawa in view of Yoshino '448, Asada, and Yoshino '299 (USPGP 2004/0071299);
- (4) claims 5 and 17 rejected under § 103(a) as unpatentable over Yanagawa in view of Grmani (USP 6,498,852).
- (5) claims 7, 10, and 19 rejected under § 103(a) as unpatentable over Yanagawa in view of Aylward (USP 6,240,189); and
- (6) claims 8, 9, and 11-13 rejected under § 103(a) as unpatentable over Yanagawa in view of Aylward and Yoshino '448

Each of independent claims 1 and 4-7 now define that the first and second sound signals are independent signals that provide different contents for different listeners. In contrast, Yanagawa is directed to producing a stereo sound from complementary left/right channels signals for producing a combined sound where a listener or listeners all listen to the same contents. That is, Yanagawa teaches producing the same contents via the left and right

channels for all listeners. Based on this distinction, applicants submit that independent claims 1 and 4-7 distinguish over Yanagawa. Applicants submit that none of the other applied references would have alleviated Yanagawa's shortcomings noted above.

Moreover, regarding independent claim 6, the examiner asserts that Yanagawa's FIR filter controls directivity by adjusting the frequency characteristics of each sound signal. In other words, the examiner asserts that Yanagawa's FIR filter provides the claimed frequency control feature of limiting or emphasizing frequency bands of the first and second sound signals.

Applicants disagree with the examiner's assessment because Yanagawa's FIR filter controls directivity by controlling the delay characteristics and not frequency characteristics. There is absolutely no support anywhere for the examiner's contention. Indeed, according to the present disclosure, band pass filters 16, 17 limit the frequency band. Yanagawa simply lacks any means for adjusting frequency characteristics. Accordingly, Yanagawa further would not have anticipated claim 6.

Regarding independent claims 1, 4, 5, and 7, the examiner asserts that Yanagawa's FIR filter measures the levels of the first and second sound signals. Again applicants disagree because Yanagawa's FIR cannot measure any level of the first and second sound signals. Note that the present disclosure uses measuring circuits 9, 10, which clearly are not part of a FIR filter. Yanagawa simply lacks the claimed measuring feature.

Dependent claim 20 further defines that the sound level adjusting unit adjusts gains of both the first and second sound signals in real time based on the levels measured by a measuring unit so that the first and second sound signals have equal magnitudes. Yanagawa clearly fails to disclose or teach the claimed sound measuring unit and the sound level adjusting unit. While Yoshino discloses adjusting attenuation factors (gains) of the audio signals so that the output signals become equal to each other, Yoshino also fails to disclose or teach adjusting the levels of different content sources for different listeners in real time.

Conclusion

For the foregoing reasons, applicants submit that the pending claims are in condition for allowance. Should the examiner have any issues concerning this reply or any other outstanding issues remaining in this application, applicants urge the examiner to contact the undersigned to expedite prosecution.

Respectfully submitted,

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